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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,843	12/21/2000	Takayuki Sugahara	0102/0151	6519

21395 7590 12/21/2004

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EXAMINER

HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,843

Applicant(s)

SUGAHARA ET AL.

Examiner

Brandon Hoffman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 and 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Rejections

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

2. Claims 11-16 and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinder et al. (U.S. Patent No. 6,105,134) in view of Takahashi et al. (U.S. Patent No. 6,507,907).

Regarding claims 11, 14, 21, and 25, Pinder et al. teaches a method/apparatus of decrypting contents information, comprising the steps of:

- Reproducing/receiving encryption-resultant contents information, encryption-resultant first-key base information, and transmission-purpose key base information from a transmission line (fig. 2B, TDS to DEMULTIPLEXER);
- Generating an authentication value from a decryption-side ID information peculiar to a decryption side and previously-fed issue ID information which has been generated by an encryption-resultant contents information provider side (fig. 2B, ref. num 232),
 - The generated authentication value is equal to an authentication value used to generate the transmission-purpose key base information (col. 7, lines 4-6);

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- Generating second-key base information from the reproduced transmission-purpose key base information and the generated authentication value according to a first function, the second-key base information being a base of a second key (fig. 2B, ref. num 234);
- Generating a second-key signal representative of the second key from the generated second-key base information according to a second function (fig. 2B, MSK);
- Decrypting the reproduced encryption-resultant first-key base information into recovered first-key base information in response to the generated second-key signal, the recovered first-key base information being a base of a first key (fig. 2B, ref. num 236);
- Generating a first-key signal representative of the first key from the recovered first key base information according to a third function (fig. 2B, CW); and
- Decrypting the reproduced encryption-resultant contents information in response to the generated first-key signal to recover original contents information (fig. 2B, ref. num 238).

Pinder et al. does not teach generating an authentication value as a result of Exclusive-OR operation between the decryption-side ID information and a preset fixed authentication value.

Takahashi et al. teaches generating an authentication value as a result of Exclusive-OR operation between the decryption-side ID information and a preset fixed

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authentication value (col. 9, lines 26-61 and fig. 4, stage 2, col. 12, lines 4-44 and fig. 5, stage 2).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine generating an authentication value as a result of Exclusive-OR operation between the decryption-side ID information and a preset fixed authentication value, as taught by Takahashi et al., with the method/apparatus of Pinder et al. It would have been obvious for such modifications because the authentication of each device (encrypting device and decrypting device) proves that the device is who it says it is. By using a value M, and incrementing it by 1 (or some other predetermined value) both the encrypting device and decrypting device can authenticate each other without have to do intensive processing (see col. 9, lines 26-61 of Takahashi et al.). By simply updating the value M by a predetermined value (1 or any other number), enough randomization is provided to properly authenticate the devices.

Regarding claims 12, 15, 22, and 26, the combination of Pinder et al. in view of Takahashi et al. teaches wherein the first function is inverse with respect to a function which has been used by the encryption-resultant contents information provider side to generate the transmission-purpose key base information (see col. 8, lines 39-63 of Pinder et al.).

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Regarding claims 13, 16, 23, and 27, the combination of Pinder et al. in view of Takahashi et al. teaches wherein the second and third functions are one-way functions (see col. 8, line 64 through col. 9, line 24 and lines 41-55 of Pinder et al.).

Regarding claims 24 and 28, the combination of Pinder et al. in view of Takahashi et al. teaches further comprising means for allowing a user to input the issue ID information (see col. 15, lines 36-55 of Pinder et al.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brandon Hoffman

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